

CARLSBAD AVENUES

Let's talk about WATER

Wherever you are in Carlsbad, you're within a couple miles of a body of water. Thus, it may seem hard to swallow in a city whose limits run for six-plus miles along the coastline of the largest ocean in the world (the Pacific) and that includes three ecologically valuable wetlands (Buena Vista, Batiquitos and Agua Hedionda Lagoons; the latter wholly in Carlsbad) that we live in a semi-desert.

The Carlsbad Water Ethic, approved by the Carlsbad Municipal Water District Board of Directors in 1991, "promotes responsible and efficient water use in our arid city."

"For the story of man is the story of water. It will end when the spring runs dry." — Carlsbad Municipal Water District's Twenty-fifth Anniversary Report

Today, water is as critical to the survival of California's inhabitants and way of life as it was centuries ago, when Native Americans followed seasonal water sources, moving family groups and entire villages wherever there was a natural spring, creek or pond. The search for an adequate, consistent supply continues.

Depending upon their area of residence or business, Carlsbad citizens are served by one of three water agencies: Carlsbad Municipal Water District, Olivenhain Municipal Water District or Vallecitos Water District. All three are part of the 23-member San Diego County Water Authority (CWA), which is a member of the Metropolitan Water District (MWD), a venerable institution that was founded in 1928 and currently supplies water to a 70-mile-wide coastal strip extending from Oxnard to the Mexican border.

CWA is MWD's largest purchaser of water. But where does MWD obtain its water? From two sources: the Colorado River and the State Water Project.

Colorado River

MWD was formed to import Colorado River water for distribution throughout southern California. To that end, MWD's first major effort was to build the 240-mile Colorado River Aqueduct (CRA), which begins at Lake Havasu (at the California/Arizona border) and ends at Lake Mathews in Riverside County.

Currently, California is entitled to take 4.4 million acre feet of Colorado River water per year. Nevertheless, it takes about 5.2 million acre feet, under a plan designed to reduce California usage over the next several years.



The Colorado River provides about 65% of all water utilized in southern California.



State Water Project

The California State Water Project (SWP) is a 600-mile storage/release project. Water is stored in the northernmost portion at Lake Oroville and released, as needed, into the Feather River, which flows south to the Sacramento River and the Sacramento-San Joaquin River Delta. From there, water is pumped from a north Delta section into a North Bay Aqueduct for delivery to Napa and Solano counties. From a south Delta section, the water is lifted into the 444-mile California Aqueduct, where it is dispersed to Alameda and Santa Clara counties as well as southward to central and southern California. The SWP connects with MWD's system at Lake Perris.



The Great Wall of China and the California Aqueduct are the only man-made structures on earth that can be seen and identified from space with the naked eye.

Imported water is a finite resource. Finding solutions is an infinite effort.

Look up in the sky: Rain and snow are the only two constant sources of water. Look around: Reclamation and desalination are two ways to (re)use water that exists. Now look in the mirror: There is a third way to preserve this precious resource and it's in your hands. Conservation is a powerful tool.

To cope with population growth and the ever-present threat of drought, Carlsbad is combining reclamation, desalination and conservation. Like a musical trio, these three efforts, which are detailed on the back, must harmonize to achieve optimum results.



Informed Involvement Is Our Goal.

AVENUES publications are created by the City of Carlsbad to communicate why things are the way they are today ... and to explain how you can help direct their progress in the future.



Reclaimed water irrigates the medians on portions of Cannon Road/Faraday Avenue.

Reclamation ... retreating wastewater to recycle for agricultural and industrial uses

In 1991, Carlsbad adopted a five-phase Recycled Water Master Plan designed to save the precious resource of potable (drinkable) water. The result is one of the largest recycled operations in the county.

- Currently, the city purchases recycled water from Leucadia County Water District's Gafner and Vallecitos Water District's Meadowlark water treatment plants for distribution to a variety of places. The Gafner water is supplied directly to the La Costa Resort & Spa.
- The recycled water from Meadowlark is supplied to Legoland, the Flower Fields, Taylor Made-Adidas, all of Aviara and individual businesses along Armada Drive.
- Carlsbad roadways are also beneficiaries of the recycled water, which is used to irrigate the median landscaping along the entire I-5 freeway within the city limits and on several major city streets.
- In all, Carlsbad supplies 2,000 acre-feet of recycled water every year.
- When the new city-owned water treatment plant is up and operating in Summer 2004, another 3,000 acre-feet will be supplied throughout the city.

Desalination ... a "get the salt out" effort to ensure a drought-proof supply

Desalination — turning salty ocean water into drinking water by removing the salinity — has been called the "wave" of the future. The CWA is creating a long-range plan that estimates water demands over the next 20 years and recommends how to fill them.

- A key component is a proposed \$250 million seawater desalination plant to be built in Carlsbad.
- Sited at the Encina Power Plant, the Poseidon Resources facility would daily turn approximately 100 million gallons of seawater into drinking water for about what it now costs to purchase imported water.

- This would be the first major desalination plant on the west coast.
- The project incorporates reverse osmosis technology to divert a portion of the power plant's cooling seawater.
- For information about the procedure, visit www.Poseidon1.com/.

Conservation ... the solution in which we all can participate

The Carlsbad water ethic recommends water-conscious practices to be used in drought and non-drought years alike. The ethic is based upon the optimistic assumption that Carlsbad residents will adopt the following conservation behaviors as a way of life.

- New landscaping shall incorporate drought-tolerant plant materials and micro-irrigation (drip) systems whenever possible.
- Water can never leave the user's property due to over-irrigation.
- Watering must be done between 4 pm – 9 am to minimize evaporation.
- Water cannot be used to clean paved surfaces (sidewalks, driveways, etc.) except to alleviate immediate safety or sanitation hazards.
- Reclaimed or recycled water shall be used wherever and whenever possible.

In line with the water ethic, business and residential customers can take advantage of a free service that conserves water and money. Upon appointment, a district water conservation specialist will perform a thorough indoor and outdoor on-site water survey, recommending how to improve water usage. For more information, call your specific district: CMWD, 438-2722; OMWD, 753-6466; VWD, 744-0460.



In 2001, California agreed to honor its original promise made to other western states to stop taking more than its "fair share" of Colorado River water by 2015. In return, the federal government consented to allow California to "overuse" its share until that time while generating other sources of water and encouraging conservation.

Further Information and Involvement

If you would like further information on water and related topics, we invite you to:

- Check out Carlsbad's history books, *Seekers of the Spring* and *Windows on the Past*, at the Carlsbad library.
- Call Public Works, Water Operations, at 438-2722.
- Call 434-2808 to sign up for the Carlsbad Citizens' Academy.
- Visit the city's website at www.ci.carlsbad.ca.us and/or the Metropolitan Water District's website at www.mwdh2o.com.

If you would like to observe and/or participate in the planning process, we invite you to:

- Attend a regularly scheduled City Council meeting, generally held on Tuesdays at 6 pm in the Council Chambers, 1200 Carlsbad Village Drive. The Council sits as the Carlsbad Municipal Water Board as needed.
- Call 434-2820 to confirm above dates and times, to be placed on a mailing list for future AVENUES publications and to get more information on how you can help direct the avenues of your city's policies and programs.

